

# Advance Summary

## U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves

### 2001 Annual Report

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**Energy Information Administration**

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# **Advance Summary: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves 2001 Annual Report**

U.S. crude oil and natural gas proved reserves increased in 2001, replacing production by substantial margins. One new deepwater field accounted for a significant portion of all new oil reserves. Thunder Horse Field is located in Mississippi Canyon Blocks 776, 777, and 778, 125 miles south-east of New Orleans at a water depth of 6,000 feet. After full development, Thunder Horse is expected to be the largest field in the Gulf of Mexico. Developing this field in water over a mile deep will be yet another extraordinary technical achievement in the Federal Offshore.

<b>As of December 31, 2001 proved reserves were:</b>		
<b>Crude Oil</b> (million barrels)		
2000	22,045	
2001	22,446	
Increase	1.8%	
<b>Dry Natural Gas</b> (billion cubic feet)		
2000	177,427	
2001	183,460	
Increase	3.4%	
<b>Natural Gas Liquids</b> (million barrels)		
2000	8,345	
2001	7,993	
Decrease	-4.2%	

U.S. crude oil proved reserves increased by almost 2 percent. Reserves additions in 2001 were 121 percent of domestic oil production. From 1977 through 1996, proved reserves of crude oil declined 17 out of 19 years. In striking contrast, they increased 4 out of the last 5 years. New field discoveries of oil in 2001 were at the highest level since Alaska's Prudhoe Bay Field were booked in the 1970s. The majority of crude oil proved reserves additions came from the deepwater Gulf of Mexico Federal Offshore and Alaska, both of which are frontier areas.

The majority of natural gas proved reserves additions were in Wyoming, Colorado, and Texas.

Significant reserves were added in the Powder River Basin coalbed methane fields and the Pinedale Field in Wyoming, the Lobo Trend and Barnett Shale gas fields in Texas, and the Wattenberg Field and the coalbed methane fields in Colorado.

Natural gas liquids reserves decreased in 2001. Usually, when gas reserves increase, the natural gas liquids associated with that gas also increase. However, coalbed methane was a large portion of the new gas reserves in 2001, and coalbed methane has effectively no natural gas liquids content. As a result, reserves of natural gas liquids declined in 2001 when production outpaced reserves additions in conventional gas reservoirs.

Proved reserves are the estimated quantities which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions. Petroleum engineering and geological judgment are required in estimating proved reserves, therefore the results are not precise measurements. This report of 2001 U.S. proved reserves of crude oil, natural gas, and natural gas liquids is the 25th in an annual series prepared by the Energy Information Administration.

## **Crude Oil**

Total discoveries of crude oil in 2001 resulted mainly from exploration in the deepwater Gulf of Mexico Federal Offshore and on the Alaskan North Slope.

Total discoveries are those reserves attributable to field extensions, new field discoveries, and new reservoir discoveries in old fields. They result from the drilling of exploratory wells. Total discoveries of crude oil were 2,565 million barrels in 2001, almost twice the year 2000 discoveries and greater than three times the prior 10-year average.

The majority of crude oil total discoveries in 2001 were new field discoveries, particularly in the Gulf of Mexico Federal Offshore and Alaska. Operators discovered 1,407 million barrels in new fields in 2001 -- four times as much as in 2000 and over six times as much as the prior 10-year average.

Extensions to existing fields accounted for 866 million barrels of crude oil reserves additions. This was a 13 percent increase over 2000 extensions, and almost twice as much as the prior 10-year average.

New reservoir discoveries in old fields were 292 million barrels, 17 percent more than in 2000 and 93 percent more than the prior 10-year average.

Reserves additions are the sum of total discoveries, revisions and adjustments, and sales and acquisitions. The net of revisions and adjustments was a very small component of crude oil reserves additions in 2001 (-162 million barrels). In past years, net revisions and adjustments have been as much as 54 percent of annual crude oil reserves additions.

The sales component of the crude oil reserves changes (529 million barrels) was less than the revision decreases component in 2001 and acquisitions (442 million barrels) were less than revision increases. The net of sales and acquisitions of crude oil proved reserves was -87 million barrels.

Other 2001 crude oil events of note:

- The annual average domestic first purchase price for crude oil decreased 18 percent from the 2000 level to \$21.84 per barrel.
- Exploratory and developmental oil completions were up 8 percent from 2000.
- In May 2000, BP Amoco contracted Mustang Engineering to provide preliminary front-end engineering/design services for topside facilities to produce Thunder Horse Field. It will be developed in a phased approach. Initial production is expected by 2005 from a floating production facility that will be capable of producing 250,000 barrels of oil per day at peak rate.

## Natural Gas

Operators added 3.4 percent to proved reserves of dry natural gas in 2001. Reserves additions were 131 percent of domestic dry natural gas production. U.S. natural gas proved reserves have increased in seven of the last eight years.

Most of the reserve increases were in Texas, Wyoming, and Colorado. The Gulf of Mexico and New Mexico had a slight increase, and Oklahoma had a slight decrease.

U.S. total discoveries of dry gas reserves were 22,758 billion cubic feet in 2001. This was 96 percent more than the prior 10-year average and 19 percent more than in 2000.

New field discoveries were 3,578 billion cubic feet, 80 percent more than the volume discovered in 2000 and 140 percent more than the prior 10-year average.

Field extensions were 16,380 billion cubic feet, 11 percent more than extensions in 2000 and also more than twice the prior 10-year average of 7,802 billion cubic feet.

New reservoir discoveries in old fields were 2,800 billion cubic feet, up 18 percent from 2000 and 20 percent more than the prior 10-year average.

Natural gas net revisions and adjustments were 424 billion cubic feet. The net of sales and acquisitions of dry natural gas proved reserves was 2,630 billion cubic feet.

Coalbed methane proved reserves and production continued to grow in 2001. Coalbed methane accounted for 9.6 percent of proved dry gas reserves and 7.9 percent of dry gas production.

Other 2001 natural gas events of note:

- Natural gas prices were up 12 percent in 2001 to an average of \$4.12 per thousand cubic feet at the wellhead, as compared to \$3.69 per thousand cubic feet in 2000. However, the prices started high in January 2001 (an average of \$8.06 per thousand cubic feet) and declined to an annual low of \$2.38 per thousand cubic feet in December.
- Exploratory gas well completions increased 54 percent in 2001 and development well drilling was up 39 percent. Operators drilled 25 percent more wells for gas in 2001 than in 2000.
- U.S. gas production increased by 2 percent in 2001 to the highest level since 1977, the year EIA initiated its proved reserves report series.

## Natural Gas Liquids

U.S. natural gas liquids proved reserves decreased 4.2 percent to 7,993 million barrels in 2001. Natural gas liquids reserves are the sum of natural gas plant liquids and lease condensate reserves.

Total proved reserves of liquid hydrocarbons (crude oil plus natural gas liquids) were 30,439 million barrels in 2001, a slight increase from the 2000 level. Natural gas liquids represented 26 percent of total liquid hydrocarbon proved reserves in 2001.

## Data

These estimates are based upon analysis of data from Form EIA-23, Annual Survey of Domestic Oil and Gas Reserves, filed by 1,439 operators of oil and gas wells, and Form EIA-64A, Annual Report of the Origin of Natural Gas Liquids Production, filed by operators of 525 active natural gas processing plants. The U.S. proved reserves estimates for crude oil and natural gas are associated with sampling errors of less than 1 percent.

**Table 1. Total U.S. Proved Reserves of Crude Oil, Dry Natural Gas, and Natural Gas Liquids, 1991-2001**

Year	Adjustments (1)	Net Revisions (2)	Revisions <sup>a</sup> and Adjustments (3)	Net of Sales and Acquisitions (4)	Extensions (5)	New Field Discoveries (6)	New Reservoir Discoveries in Old Fields (7)	Total <sup>b</sup> Discoveries (8)	Estimated Production (9)	Proved <sup>c</sup> Reserves 12/31 (10)	Change from Prior Year (11)
<b>Crude Oil (million barrels of 42 U.S. gallons)</b>											
1991	163	223	386	NA	365	97	92	554	2,512	24,682	-1,572
1992	290	735	1,025	NA	391	8	85	484	2,446	23,745	-937
1993	271	495	766	NA	356	319	110	785	2,339	22,957	-788
1994	189	1,007	1,196	NA	397	64	111	572	2,268	22,457	-500
1995	122	1,028	1,150	NA	500	114	343	957	2,213	22,351	-106
1996	175	737	912	NA	543	243	141	927	2,173	22,017	-334
1997	520	914	1,434	NA	477	637	119	1,233	2,138	22,546	+529
1998	-638	518	-120	NA	327	152	120	599	1,991	21,034	-1,512
1999	139	1,819	1,958	NA	259	321	145	725	1,952	21,765	+731
2000	143	746	889	-20	766	276	249	1,291	1,880	22,045	+280
2001	-4	-158	-162	-87	866	1,407	292	2,565	1,915	22,446	+401
<b>Dry Natural Gas (billion cubic feet, 14.73 psia, 60° Fahrenheit)</b>											
1991	2,960	4,416	7,376	NA	5,090	848	1,604	7,542	17,202	167,062	-2,284
1992	2,235	6,093	8,328	NA	4,675	649	1,724	7,048	17,423	165,015	-2,047
1993	972	5,349	6,321	NA	6,103	899	1,866	8,868	17,789	162,415	-2,600
1994	1,945	5,484	7,429	NA	6,941	1,894	3,480	12,315	18,322	163,837	+1,422
1995	580	7,734	8,314	NA	6,843	1,666	2,452	10,961	17,966	165,146	+1,309
1996	3,785	4,086	7,871	NA	7,757	1,451	3,110	12,318	18,861	166,474	+1,328
1997	-590	4,902	4,312	NA	10,585	2,681	2,382	15,648	19,211	167,223	+749
1998	-1,635	5,740	4,105	NA	8,197	1,074	2,162	11,433	18,720	164,041	-3,182
1999	982	10,504	11,486	NA	7,043	1,568	2,196	10,807	18,928	167,406	+3,365
2000	-891	6,962	6,071	4,031	14,787	1,983	2,368	19,138	19,219	177,427	+10,021
2001	2,742	-2,318	424	2,630	16,380	3,578	2,800	22,758	19,779	183,460	+6,033
<b>Natural Gas Liquids (million barrels of 42 U.S. gallons)</b>											
1991	233	130	363	NA	189	25	55	269	754	7,464	-122
1992	225	261	486	NA	190	20	64	274	773	7,451	-13
1993	102	124	226	NA	245	24	64	333	788	7,222	-229
1994	43	197	240	NA	314	54	131	499	791	7,170	-52
1995	192	277	469	NA	432	52	67	551	791	7,399	+229
1996	474	175	649	NA	451	65	109	625	850	7,823	+424
1997	-15	289	274	NA	535	114	90	739	864	7,973	+150
1998	-361	208	-153	NA	383	66	88	537	833	7,524	-449
1999	99	727	826	NA	313	51	88	452	896	7,906	+382
2000	-83	459	376	145	645	92	102	839	921	8,345	+439
2001	-429	-132	-561	102	717	138	142	997	890	7,993	-352

<sup>a</sup>Revisions and adjustments = Col. 1 + Col. 2.

<sup>b</sup>Total discoveries = Col. 5 + Col. 6 + Col. 7.

<sup>c</sup>Proved reserves = Col. 10 from prior year + Col. 3 + Col. 4 + Col. 8 - Col. 9.

NA=Not available.

Notes: Old means discovered in a prior year. New means discovered during the report year. The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves" and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." They may differ from the official EIA production data for crude oil, natural gas, and natural gas liquids for 2001 contained in the *Petroleum Supply Annual 2001*, DOE/EIA-0340(01) and the *Natural Gas Annual 2001*, DOE/EIA-0131(01).

Sources: *U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves*, 1991 through 2001 annual reports, DOE/EIA-0216.

**Table 2. Crude Oil Proved Reserves, Reserves Changes, and Production, 2001**  
 (Million Barrels of 42 U.S. Gallons)

State and Subdivision	Published Proved Reserves 12/31/00	Changes in Reserves During 2001									Estimated Production (-)	Proved Reserves 12/31/01
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)			
Alaska .....	4,861	1	128	215	0	0	150	281	0	355	4,851	
<b>Lower 48 States</b> .....	<b>17,184</b>	<b>-5</b>	<b>1,473</b>	<b>1,544</b>	<b>529</b>	<b>442</b>	<b>716</b>	<b>1,126</b>	<b>292</b>	<b>1,560</b>	<b>17,595</b>	
Alabama .....	34	-4	13	1	1	1	1	0	3	4	42	
Arkansas .....	48	9	2	7	3	1	0	0	0	7	43	
California .....	3,813	5	232	253	3	5	99	0	0	271	3,627	
Coastal Region Onshore .....	455	-2	6	56	0	0	0	0	0	18	385	
Los Angeles Basin Onshore...	292	-2	25	28	1	1	26	0	0	16	297	
San Joaquin Basin Onshore ..	2,870	10	188	151	2	4	67	0	0	220	2,766	
State Offshore .....	196	-1	13	18	0	0	6	0	0	17	179	
Colorado .....	217	0	7	18	16	14	8	0	0	16	196	
Florida .....	76	1	3	1	0	0	0	0	0	4	75	
Illinois .....	111	-1	3	11	2	0	2	0	0	10	92	
Indiana .....	15	1	1	2	1	0	0	0	0	2	12	
Kansas .....	237	-9	17	22	7	17	4	1	8	30	216	
Kentucky .....	24	1	1	2	5	0	0	0	0	2	17	
Louisiana .....	529	48	52	60	50	67	40	0	13	75	564	
North .....	97	2	10	14	10	15	1	0	0	14	87	
South Onshore .....	310	43	37	37	32	39	19	0	7	45	341	
State Offshore .....	122	3	5	9	8	13	20	0	6	16	136	
Michigan .....	56	-1	4	6	1	0	0	0	0	6	46	
Mississippi .....	182	5	5	22	5	17	3	0	0	18	167	
Montana .....	235	16	8	19	6	6	35	0	1	16	260	
Nebraska .....	18	-1	2	1	1	0	0	0	0	2	15	
New Mexico .....	719	1	143	119	19	13	37	0	2	62	715	
East .....	705	1	142	117	19	13	37	0	2	61	703	
West .....	14	0	1	2	0	0	0	0	0	1	12	
North Dakota .....	270	4	17	22	5	5	8	0	81	30	328	
Ohio .....	59	6	6	18	2	0	0	0	1	6	46	
Oklahoma .....	610	12	50	64	28	15	13	0	1	53	556	
Pennsylvania .....	15	-3	1	2	0	0	0	0	0	1	10	
Texas .....	5,273	-90	376	466	203	143	288	2	10	389	4,944	
RRC District 1 .....	87	-26	3	8	7	5	0	0	0	8	46	
RRC District 2 Onshore .....	54	0	2	5	5	5	5	0	0	8	48	
RRC District 3 Onshore .....	213	8	15	21	41	45	6	0	1	31	195	
RRC District 4 Onshore .....	34	1	5	5	2	2	0	0	2	5	32	
RRC District 5 .....	44	1	2	17	1	4	1	0	0	5	29	
RRC District 6 .....	213	4	10	16	21	17	14	0	0	21	200	
RRC District 7B .....	124	-10	6	15	4	2	1	0	0	13	91	
RRC District 7C .....	206	-22	20	19	8	9	18	0	1	17	188	
RRC District 8 .....	2,073	-19	116	178	69	33	43	1	3	123	1,880	
RRC District 8A .....	2,022	-15	176	157	36	17	195	1	2	135	2,070	
RRC District 9 .....	131	-7	13	16	6	2	2	0	1	16	104	
RRC District 10 .....	67	-5	7	9	3	2	3	0	0	7	55	
State Offshore .....	5	0	1	0	0	0	0	0	0	0	6	
Utah .....	283	-2	17	15	8	9	0	0	0	13	271	
West Virginia .....	12	-3	1	1	0	0	0	0	0	1	8	
Wyoming .....	561	-1	23	71	20	23	19	0	3	48	489	
Federal Offshore .....	3,770	-3	487	340	143	106	158	1,123	169	492	4,835	
Pacific (California) .....	596	-1	33	51	0	0	3	0	0	33	547	
Gulf of Mexico (Louisiana)....	2,751	-2	400	236	94	105	153	1,051	166	417	3,877	
Gulf of Mexico (Texas).....	423	0	54	53	49	1	2	72	3	42	411	
Miscellaneous <sup>a</sup> .....	17	4	2	1	0	0	1	0	0	2	21	
<b>U.S. Total</b> .....	<b>22,045</b>	<b>-4</b>	<b>1,601</b>	<b>1,759</b>	<b>529</b>	<b>442</b>	<b>866</b>	<b>1,407</b>	<b>292</b>	<b>1,915</b>	<b>22,446</b>	

<sup>a</sup>Includes Arizona, Missouri, Nevada, New York, South Dakota, Tennessee, and Virginia.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." They may differ from the official Energy Information Administration production data for crude oil for 2001 contained in the *Petroleum Supply Annual 2001*, DOE/EIA-0340(01).

Source: Energy Information Administration, Office of Oil and Gas.

**Table 3. Dry Natural Gas Proved Reserves, Reserves Changes, and Production, 2001**  
 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/00	Changes in Reserves During 2001										Proved Reserves 12/31/01
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)		
Alaska .....	9,237	-11	233	335	0	0	59	74	4	461	8,800	
<b>Lower 48 States</b> .....	<b>168,190</b>	<b>2,753</b>	<b>18,125</b>	<b>20,341</b>	<b>11,380</b>	<b>14,010</b>	<b>16,321</b>	<b>3,504</b>	<b>2,796</b>	<b>19,318</b>	<b>174,660</b>	
Alabama .....	4,149	36	78	218	1	3	169	42	2	345	3,915	
Arkansas .....	1,581	28	128	88	8	5	119	0	11	160	1,616	
California .....	2,849	36	162	255	7	20	210	0	2	336	2,681	
Coastal Region Onshore .....	234	2	14	61	0	0	0	0	0	12	177	
Los Angeles Basin Onshore....	193	6	17	27	1	0	8	0	0	9	187	
San Joaquin Basin Onshore ..	2,331	28	125	161	6	20	200	0	2	307	2,232	
State Offshore .....	91	0	6	6	0	0	2	0	0	8	85	
Colorado .....	10,428	155	1,882	1,513	2,468	2,794	2,120	4	7	882	12,527	
Florida .....	82	0	7	0	0	0	0	0	0	5	84	
Kansas.....	5,299	60	279	220	259	331	46	2	1	438	5,101	
Kentucky .....	1,760	158	348	397	50	49	42	0	23	73	1,860	
Louisiana .....	9,239	322	1,013	1,696	496	888	1,427	27	566	1,479	9,811	
North .....	3,298	49	298	522	58	189	993	1	23	390	3,881	
South Onshore.....	5,245	267	648	1,091	370	524	366	17	510	931	5,185	
State Offshore .....	696	6	67	83	68	175	68	9	33	158	745	
Michigan .....	2,729	653	263	524	24	2	63	50	3	239	2,976	
Mississippi.....	618	53	70	43	34	29	43	0	19	94	661	
Montana.....	885	51	82	90	57	59	36	1	4	73	898	
New Mexico.....	17,322	9	1,599	1,244	312	307	1,216	21	32	1,536	17,414	
East .....	3,537	136	470	548	201	126	479	20	17	518	3,518	
West.....	13,785	-127	1,129	696	111	181	737	1	15	1,018	13,896	
New York.....	322	-18	29	51	1	0	47	1	17	28	318	
North Dakota.....	433	17	48	32	8	5	3	0	18	41	443	
Ohio.....	1,185	31	129	287	87	62	9	0	12	84	970	
Oklahoma .....	13,699	196	1,458	1,895	480	671	1,325	13	52	1,481	13,558	
Pennsylvania.....	1,741	3	201	219	11	32	108	33	1	114	1,775	
Texas.....	42,082	658	3,594	5,191	2,902	4,297	4,944	603	580	5,138	43,527	
RRC District 1 .....	1,032	17	87	120	30	44	84	7	1	104	1,018	
RRC District 2 Onshore.....	1,980	-231	146	246	93	270	175	14	108	322	1,801	
RRC District 3 Onshore.....	3,873	54	422	498	563	639	413	86	85	741	3,770	
RRC District 4 Onshore.....	9,645	228	809	1,211	674	712	1,284	300	258	1,395	9,956	
RRC District 5 .....	3,168	15	398	650	22	822	779	51	5	335	4,231	
RRC District 6 .....	5,976	159	408	419	886	1,110	404	5	15	644	6,128	
RRC District 7B .....	312	-7	21	42	15	10	24	0	0	51	252	
RRC District 7C .....	3,504	175	285	790	425	449	413	0	24	315	3,320	
RRC District 8 .....	5,388	58	431	569	111	117	340	67	67	533	5,255	
RRC District 8A .....	1101	5	81	90	13	13	62	0	1	75	1,085	
RRC District 9 .....	1626	77	109	127	18	16	790	0	1	185	2,289	
RRC District 10 .....	4,079	82	381	404	46	75	152	1	8	373	3,955	
State Offshore .....	398	26	16	25	6	20	24	72	7	65	467	
Utah .....	4,235	135	805	606	17	37	269	4	5	288	4,579	
Virginia.....	1704	19	90	145	718	842	31	0	7	78	1,752	
West Virginia .....	2,900	-225	315	279	29	32	96	0	26	158	2,678	
Wyoming .....	16,158	306	1,860	1,488	1,845	2,026	2,574	44	49	1,286	18,398	
Federal Offshore .....	26,748	60	3,682	3,856	1,565	1,519	1,387	2,659	1,359	4,957	27,036	
Pacific (California) .....	576	1	95	101	0	0	13	0	0	44	540	
Gulf of Mexico (Louisiana) <sup>a</sup> ....	19,788	40	2,663	2,877	1,309	1,415	1,085	1,471	1,180	3,735	19,721	
Gulf of Mexico (Texas).....	6,384	19	924	878	256	104	289	1,188	179	1,178	6,775	
Miscellaneous <sup>b</sup> .....	42	10	3	4	1	0	37	0	0	5	82	
<b>U.S. Total .....</b>	<b>177,427</b>	<b>2,742</b>	<b>18,358</b>	<b>20,676</b>	<b>11,380</b>	<b>14,010</b>	<b>16,380</b>	<b>3,578</b>	<b>2,800</b>	<b>19,779</b>	<b>183,460</b>	

<sup>a</sup>Includes Federal offshore Alabama.

<sup>b</sup>Includes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, Oregon, South Dakota, and Tennessee.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves," and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." They may differ from the official Energy Information Administration production data for natural gas for 2001 contained in the *Natural Gas Annual 2001*, DOE/EIA-0131(01).

Source: Energy Information Administration, Office of Oil and Gas.

**Table 4. Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2001** (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/99	Changes in Reserves During 2001										Proved Reserves 12/31/01
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)		
Alaska .....	9,331	0	236	338	0	0	60	75	4	467	8,901	
<b>Lower 48 States</b> .....	<b>177,179</b>	<b>1,849</b>	<b>18,943</b>	<b>21,279</b>	<b>11,885</b>	<b>14,600</b>	<b>17,123</b>	<b>3,593</b>	<b>2,894</b>	<b>20,175</b>	<b>182,842</b>	
Alabama .....	4,269	-39	80	225	1	3	174	43	3	349	3,958	
Arkansas .....	1,584	28	128	88	8	5	120	0	11	161	1,619	
California .....	2,952	22	168	264	7	21	216	0	2	347	2,763	
Coastal Region Onshore .....	244	3	15	64	0	0	0	0	0	13	185	
Los Angeles Basin Onshore....	204	3	18	28	1	0	8	0	0	9	195	
San Joaquin Basin Onshore ..	2,413	16	129	166	6	21	206	0	2	317	2,298	
State Offshore .....	91	0	6	6	0	0	2	0	0	8	85	
Colorado .....	10,837	102	1,945	1,564	2,551	2,888	2,191	4	8	911	12,949	
Florida .....	93	0	9	0	0	0	0	0	0	6	96	
Kansas.....	5,682	50	299	235	277	355	50	3	1	468	5,460	
Kentucky .....	1,837	175	365	417	52	51	44	0	24	77	1,950	
Louisiana .....	9,512	278	1,040	1,737	511	913	1,451	29	582	1,517	10,040	
North .....	3,344	43	302	528	59	191	1,004	1	23	394	3,927	
South Onshore.....	5,447	230	668	1,123	381	540	377	18	525	960	5,341	
State Offshore .....	721	5	70	86	71	182	70	10	34	163	772	
Michigan .....	2,772	675	268	534	25	2	64	51	3	244	3,032	
Mississippi .....	620	53	70	43	34	29	43	0	19	94	663	
Montana.....	892	53	82	91	57	60	37	1	4	74	907	
New Mexico.....	18,509	-29	1,712	1,343	341	332	1,310	23	35	1,649	18,559	
East .....	3,998	92	523	610	224	141	534	22	19	576	3,919	
West.....	14,511	-121	1,189	733	117	191	776	1	16	1,073	14,640	
New York.....	322	-18	29	51	1	0	47	1	17	28	318	
North Dakota.....	487	15	54	36	9	6	3	0	21	46	495	
Ohio .....	1,186	31	129	287	87	62	9	0	12	84	971	
Oklahoma .....	14,543	181	1,545	2,008	509	711	1,404	14	55	1,570	14,366	
Pennsylvania.....	1,740	9	202	220	11	32	109	34	1	114	1,782	
Texas.....	45,419	274	3,833	5,550	3,086	4,520	5,268	632	612	5,460	46,462	
RRC District 1 .....	1,106	-9	91	126	31	47	88	8	1	109	1,066	
RRC District 2 Onshore.....	2,045	-237	151	254	96	279	181	15	112	333	1,863	
RRC District 3 Onshore.....	4,042	65	441	521	589	669	432	90	89	775	3,943	
RRC District 4 Onshore.....	10,118	138	841	1,258	700	740	1,335	312	268	1,449	10,345	
RRC District 5 .....	3,217	9	404	659	23	834	789	52	5	339	4,289	
RRC District 6 .....	6,365	74	428	440	930	1,164	423	5	16	676	6,429	
RRC District 7B .....	356	-5	24	49	17	12	28	0	0	59	290	
RRC District 7C .....	4,132	30	322	893	481	509	467	0	27	356	3,757	
RRC District 8 .....	6,136	87	493	650	127	134	389	77	77	609	6,007	
RRC District 8A .....	1,215	-1	89	99	15	14	68	0	1	82	1,190	
RRC District 9 .....	1,854	46	122	141	21	17	880	0	1	206	2,552	
RRC District 10 .....	4,433	52	411	435	50	81	164	1	8	402	4,263	
State Offshore .....	400	25	16	25	6	20	24	72	7	65	468	
Utah .....	4,472	66	835	629	18	38	279	4	5	299	4,753	
Virginia.....	1,704	19	90	145	718	842	31	0	7	78	1,752	
West Virginia.....	3,062	-239	333	295	30	33	101	0	27	167	2,825	
Wyoming .....	17,211	151	1,961	1,569	1,946	2,136	2,714	46	51	1,356	19,399	
Federal Offshore .....	27,467	-54	3,763	3,944	1,605	1,561	1,421	2,708	1,394	5,071	27,640	
Pacific (California) .....	576	1	95	101	0	0	13	0	0	44	540	
Gulf of Mexico (Louisiana) <sup>a</sup> .....	20,466	-66	2,739	2,960	1,347	1,456	1,117	1,514	1,214	3,843	20,290	
Gulf of Mexico (Texas).....	6,425	11	929	883	258	105	291	1,194	180	1,184	6,810	
Miscellaneous <sup>b</sup> .....	42	11	3	4	1	0	37	0	0	5	83	
<b>U.S. Total</b> .....	<b>186,510</b>	<b>1,849</b>	<b>19,179</b>	<b>21,617</b>	<b>11,885</b>	<b>14,600</b>	<b>17,183</b>	<b>3,668</b>	<b>2,898</b>	<b>20,642</b>	<b>191,743</b>	

<sup>a</sup>Includes Federal offshore Alabama.

<sup>b</sup>Includes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, Oregon, South Dakota, and Tennessee.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." They may differ from the official Energy Information Administration production data for natural gas for 2001 contained in the *Natural Gas Annual 2001*, DOE/EIA-0131(01).

Source: Energy Information Administration, Office of Oil and Gas.

**Table 5. Nonassociated Natural Gas Proved Reserves, Reserves Changes, and Production, Wet After Lease Separation, 2001** (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/00	Changes in Reserves During 2001										Proved Reserves 12/31/01
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)		
Alaska .....	2,564	-1	65	206	0	0	40	56	4	213	2,309	
<b>Lower 48 States</b> .....	<b>154,113</b>	<b>1,356</b>	<b>15,852</b>	<b>18,179</b>	<b>10,733</b>	<b>13,756</b>	<b>15,947</b>	<b>2,322</b>	<b>2,416</b>	<b>17,238</b>	<b>159,612</b>	
Alabama.....	4,241	-35	77	224	1	2	173	43	0	345	3,931	
Arkansas.....	1,545	28	127	87	3	5	120	0	11	157	1,589	
California .....	754	9	80	43	5	16	123	0	2	94	842	
Coastal Region Onshore .....	0	0	0	0	0	0	0	0	0	0	0	
Los Angeles Basin Onshore...	1	0	0	0	0	0	0	0	0	0	1	
San Joaquin Basin Onshore ..	748	9	78	42	5	16	123	0	2	93	836	
State Offshore .....	5	0	2	1	0	0	0	0	0	1	5	
Colorado .....	9,877	65	1,882	1,530	2,524	2,865	2,113	4	6	834	11,924	
Florida .....	0	0	0	0	0	0	0	0	0	0	0	
Kansas.....	5,641	33	290	231	274	304	48	3	1	460	5,355	
Kentucky .....	1,810	176	365	416	52	51	44	0	24	77	1,925	
Louisiana .....	8,704	238	914	1,582	423	782	1,402	26	563	1,379	9,245	
North .....	3,158	39	273	484	23	134	1,002	0	23	363	3,759	
South Onshore.....	4,954	197	586	1,021	339	484	345	18	511	876	4,859	
State Offshore .....	592	2	55	77	61	164	55	8	29	140	627	
Michigan .....	2,558	687	246	493	23	2	61	50	3	218	2,873	
Mississippi .....	585	55	66	36	31	28	41	0	19	90	637	
Montana.....	822	48	70	82	52	56	22	1	4	67	822	
New Mexico.....	16,922	-65	1,492	1,071	301	292	1,207	21	30	1,415	17,112	
East .....	2,526	46	311	349	185	103	435	20	16	352	2,571	
West.....	14,396	-111	1,181	722	116	189	772	1	14	1,063	14,541	
New York.....	320	-19	25	51	1	0	47	1	17	28	311	
North Dakota.....	223	5	4	8	1	0	1	0	16	15	225	
Ohio.....	717	-51	102	145	12	62	2	0	4	48	631	
Oklahoma .....	13,430	-31	1,417	1,743	423	689	1,271	14	52	1,420	13,256	
Pennsylvania.....	1,583	7	184	212	10	32	100	34	1	105	1,614	
Texas.....	38,585	255	3,276	4,625	2,634	4,134	4,940	627	594	4,776	40,376	
RRC District 1 .....	1,037	-7	84	120	8	44	88	8	1	103	1,024	
RRC District 2 Onshore .....	1,930	-209	138	230	81	275	161	15	110	311	1,798	
RRC District 3 Onshore .....	3,404	50	358	420	410	504	392	89	83	639	3,411	
RRC District 4 Onshore .....	9,942	137	830	1,227	692	735	1,330	312	266	1,427	10,206	
RRC District 5 .....	3,089	8	398	604	22	828	781	52	5	329	4,206	
RRC District 6 .....	5,901	58	408	423	890	1,152	422	5	16	633	6,016	
RRC District 7B .....	242	1	17	37	13	10	27	0	0	44	203	
RRC District 7C .....	3,439	76	260	791	448	441	406	0	26	286	3,123	
RRC District 8 .....	3,345	26	277	303	22	37	275	73	72	375	3,405	
RRC District 8A .....	69	17	12	8	2	2	2	0	0	10	82	
RRC District 9 .....	1,645	43	104	58	15	15	879	0	1	186	2,428	
RRC District 10 .....	4,143	30	374	379	25	71	153	1	8	368	4,008	
State Offshore .....	399	25	16	25	6	20	24	72	6	65	466	
Utah .....	4,125	58	790	554	1	20	279	4	5	276	4,450	
Virginia.....	1,704	19	90	145	718	842	31	0	7	78	1,752	
West Virginia.....	2,929	-218	330	255	6	33	101	0	27	164	2,777	
Wyoming .....	16,559	131	1,872	1,386	1,919	2,120	2,713	46	50	1,275	18,911	
Federal Offshore .....	20,456	-46	2,150	3,258	1,319	1,421	1,071	1,448	980	3,913	18,990	
Pacific (California) .....	76	0	0	22	0	0	0	0	0	4	50	
Gulf of Mexico (Louisiana) <sup>a</sup> .....	15,350	-58	1,473	2,423	1,190	1,319	783	401	809	2,928	13,536	
Gulf of Mexico (Texas).....	5,030	12	677	813	129	102	288	1,047	171	981	5,404	
Miscellaneous <sup>b</sup> .....	23	7	3	2	0	0	37	0	0	4	64	
<b>U.S. Total</b> .....	<b>156,677</b>	<b>1,355</b>	<b>15,917</b>	<b>18,385</b>	<b>10,733</b>	<b>13,756</b>	<b>15,987</b>	<b>2,378</b>	<b>2,420</b>	<b>17,451</b>	<b>161,921</b>	

<sup>a</sup>Includes Federal offshore Alabama.

<sup>b</sup>Includes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, Oregon, South Dakota, and Tennessee.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." They may differ from the official Energy Information Administration production data for natural gas for 2001 contained in the *Natural Gas Annual 2001*, DOE/EIA-0131(01).

Source: Energy Information Administration, Office of Oil and Gas.

**Table 6. Associated-Dissolved Natural Gas Proved Reserves, Reserves Changes, and Production, 2001**  
 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

State and Subdivision	Published Proved Reserves 12/31/00	Changes in Reserves During 2001										Proved Reserves 12/31/01
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)	Estimated Production (-)		
Alaska .....	6,768	0	171	133	0	0	20	19	0	253	6,592	
<b>Lower 48 States</b> .....	<b>23,065</b>	<b>499</b>	<b>3,088</b>	<b>3,099</b>	<b>1,145</b>	<b>845</b>	<b>1,174</b>	<b>1,268</b>	<b>477</b>	<b>2,940</b>	<b>23,232</b>	
Alabama.....	29	-4	3	1	1	1	1	0	2	4	26	
Arkansas .....	39	-1	1	1	5	0	0	0	0	3	30	
California .....	2,198	16	87	222	2	5	93	0	0	253	1,922	
Coastal Region Onshore .....	244	3	15	64	0	0	0	0	0	13	185	
Los Angeles Basin Onshore....	203	3	18	28	1	0	8	0	0	9	194	
San Joaquin Basin Onshore ..	1,665	9	50	124	1	5	83	0	0	224	1,463	
State Offshore .....	86	1	4	6	0	0	2	0	0	7	80	
Colorado .....	960	37	63	34	27	24	78	0	1	77	1,025	
Florida .....	93	0	9	0	0	0	0	0	0	6	96	
Kansas.....	40	19	9	4	3	51	2	0	0	9	105	
Kentucky .....	27	-2	0	0	0	0	0	0	0	0	25	
Louisiana .....	807	43	126	155	88	131	49	2	19	138	796	
North .....	186	4	29	44	36	57	2	1	0	31	168	
South Onshore.....	492	35	82	102	42	56	32	0	14	84	483	
State Offshore .....	129	4	15	9	10	18	15	1	5	23	145	
Michigan .....	214	-12	22	41	2	0	3	1	0	26	159	
Mississippi.....	35	-3	4	7	3	2	2	0	0	4	26	
Montana.....	70	4	12	9	5	4	15	0	1	7	85	
New Mexico .....	1,588	35	220	272	39	39	103	2	5	234	1,447	
East .....	1,473	46	212	261	39	37	99	2	3	224	1,348	
West.....	115	-11	8	11	0	2	4	0	2	10	99	
New York.....	2	2	4	0	0	0	0	0	0	1	7	
North Dakota.....	264	10	49	28	7	6	2	0	5	31	270	
Ohio.....	469	83	27	143	75	0	7	0	8	36	340	
Oklahoma .....	1,113	211	128	265	86	22	133	0	3	150	1,109	
Pennsylvania.....	157	3	18	8	1	0	8	0	0	9	168	
Texas.....	6,833	21	556	924	448	386	328	4	18	685	6,089	
RRC District 1 .....	69	1	7	6	23	2	0	0	0	7	43	
RRC District 2 Onshore.....	115	-26	13	24	16	4	20	0	1	22	65	
RRC District 3 Onshore.....	638	16	83	101	178	165	39	1	6	136	533	
RRC District 4 Onshore.....	176	2	11	31	8	5	5	0	2	22	140	
RRC District 5 .....	128	0	6	55	0	6	8	0	0	10	83	
RRC District 6 .....	464	13	20	16	39	12	1	0	0	43	412	
RRC District 7B .....	114	-4	6	12	4	2	1	0	0	15	88	
RRC District 7C .....	693	-45	62	102	33	67	61	0	1	70	634	
RRC District 8 .....	2,791	62	216	347	105	97	114	3	5	234	2,602	
RRC District 8A .....	1,146	-21	77	91	12	13	67	0	1	72	1,108	
RRC District 9 .....	209	1	18	83	5	2	2	0	0	20	124	
RRC District 10 .....	289	22	37	56	25	11	10	0	1	34	255	
State Offshore .....	1	0	0	0	0	0	0	0	1	0	2	
Utah .....	348	6	46	75	17	18	0	0	0	23	303	
Virginia.....	0	0	0	0	0	0	0	0	0	0	0	
West Virginia.....	98	14	2	39	24	0	0	0	0	3	48	
Wyoming .....	652	20	89	183	27	16	1	0	1	81	488	
Federal Offshore .....	7,010	-7	1,613	686	285	140	349	1,259	414	1,158	8,649	
Pacific (California) .....	500	1	95	79	0	0	13	0	0	40	490	
Gulf of Mexico (Louisiana) <sup>a</sup> ....	5,115	-7	1,266	537	156	137	333	1,112	405	915	6,753	
Gulf of Mexico (Texas).....	1,395	-1	252	70	129	3	3	147	9	203	1,406	
Miscellaneous <sup>b</sup> .....	19	4	0	2	0	0	0	0	0	2	19	
<b>U.S. Total</b> .....	<b>29,833</b>	<b>499</b>	<b>3,259</b>	<b>3,232</b>	<b>1,145</b>	<b>845</b>	<b>1,194</b>	<b>1,287</b>	<b>477</b>	<b>3,193</b>	<b>29,824</b>	

<sup>a</sup>Includes Federal offshore Alabama.

<sup>b</sup>Includes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, Oregon, South Dakota, and Tennessee.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves." They may differ from the official Energy Information Administration production data for natural gas for 2001 contained in the *Natural Gas Annual 2001*, DOE/EIA-0131(01).

Source: Energy Information Administration, Office of Oil and Gas.

**Table 7. Natural Gas Liquids Proved Reserves, Reserves Changes, and Production,  
Wet After Lease Separation, 2001 (Million Barrels of 42 U.S. Gallons)**

State and Subdivision	Published Proved Reserves 12/31/00	Changes in Reserves During 2001									Estimated Production (-)	Proved Reserves 12/31/01
		Adjustments (+,-)	Revision Increases (+)	Revision Decreases (-)	Sales (-)	Acquisitions (+)	Extensions (+)	New Field Discoveries (+)	New Reservoir Discoveries in Old Fields (+)			
Alaska .....	277	0	148	0	0	0	0	0	0	20	405	
<b>Lower 48 States</b> .....	<b>8,068</b>	<b>-429</b>	<b>809</b>	<b>1,089</b>	<b>448</b>	<b>550</b>	<b>717</b>	<b>138</b>	<b>142</b>	<b>870</b>	<b>7,588</b>	
Alabama .....	150	-71	3	16	0	0	4	1	0	7	64	
Arkansas .....	5	0	1	0	0	0	0	0	0	1	5	
California .....	101	-18	5	10	0	1	5	0	0	8	76	
Coastal Region Onshore .....	27	-6	1	5	0	0	0	0	0	1	16	
Los Angeles Basin Onshore...	10	-2	1	1	0	0	0	0	0	0	8	
San Joaquin Basin Onshore ..	64	-10	3	4	0	1	5	0	0	7	52	
State Offshore .....	0	0	0	0	0	0	0	0	0	0	0	
Colorado .....	316	-34	49	38	59	76	60	0	0	25	345	
Florida .....	11	1	1	0	0	0	0	0	0	1	12	
Kansas .....	306	10	17	13	15	20	3	0	0	26	302	
Kentucky .....	56	18	13	15	2	2	2	0	1	3	72	
Louisiana .....	436	-29	43	93	42	62	37	2	43	68	391	
North .....	61	-4	9	13	2	6	11	0	1	7	62	
South Onshore .....	337	-39	27	72	35	42	20	1	37	49	269	
State Offshore .....	38	14	7	8	5	14	6	1	5	12	60	
Michigan .....	35	14	4	8	0	0	1	1	0	4	43	
Mississippi .....	8	3	2	1	1	1	0	0	0	2	10	
Montana .....	4	1	1	1	0	0	0	0	0	0	5	
New Mexico .....	896	-10	90	86	25	18	70	2	2	84	873	
East .....	333	-32	42	52	21	11	38	2	1	43	279	
West .....	563	22	48	34	4	7	32	0	1	41	594	
North Dakota .....	54	4	6	4	1	1	0	0	2	5	57	
Oklahoma .....	734	-14	74	109	27	35	72	1	3	75	694	
Texas .....	2,819	-128	246	365	151	187	277	35	31	298	2,653	
RRC District 1 .....	55	-12	3	6	1	2	3	0	0	4	40	
RRC District 2 Onshore .....	72	-8	7	10	3	10	6	1	4	12	67	
RRC District 3 Onshore .....	209	16	33	29	30	36	24	6	5	44	226	
RRC District 4 Onshore .....	406	-37	32	48	24	25	47	19	11	53	378	
RRC District 5 .....	49	-6	5	13	0	9	8	1	0	4	49	
RRC District 6 .....	283	-15	26	24	32	42	16	0	1	28	269	
RRC District 7B .....	34	2	2	5	2	1	3	0	0	6	29	
RRC District 7C .....	434	-95	28	93	38	40	41	0	2	29	290	
RRC District 8 .....	526	22	49	68	11	11	36	7	7	54	525	
RRC District 8A .....	217	39	19	21	3	3	14	0	0	17	251	
RRC District 9 .....	161	-22	10	11	2	2	66	0	0	15	189	
RRC District 10 .....	369	-13	32	37	5	6	13	0	1	31	335	
State Offshore .....	4	1	0	0	0	0	0	1	0	1	5	
Utah and Wyoming .....	947	-147	104	78	73	87	118	2	2	65	897	
West Virginia .....	105	1	12	11	1	1	4	0	1	6	106	
Federal Offshore .....	1,078	-30	137	240	51	59	64	94	57	192	976	
Pacific (California) .....	4	0	0	0	0	0	5	0	0	0	9	
Gulf of Mexico (Louisiana) <sup>a</sup> .....	921	-27	103	224	50	57	52	47	53	147	785	
Gulf of Mexico (Texas) .....	153	-3	34	16	1	2	7	47	4	45	182	
Miscellaneous <sup>b</sup> .....	7	0	1	1	0	0	0	0	0	0	7	
<b>U.S. Total</b> .....	<b>8,345</b>	<b>-429</b>	<b>957</b>	<b>1,089</b>	<b>448</b>	<b>550</b>	<b>717</b>	<b>138</b>	<b>142</b>	<b>890</b>	<b>7,993</b>	

<sup>a</sup>Includes Federal offshore Alabama.

<sup>b</sup>Includes Arizona, Illinois, Indiana, Maryland, Missouri, Nebraska, Nevada, New York, Ohio, Oregon, Pennsylvania, South Dakota, Tennessee, and Virginia.

Note: The production estimates in this table are based on data reported on Form EIA-23, "Annual Survey of Domestic Oil and Gas Reserves," and Form EIA-64A, "Annual Report of the Origin of Natural Gas Liquids Production." They may differ from the official Energy Information Administration production data for natural gas and natural gas liquids for 2001 contained in the publications *Petroleum Supply Annual 2001*, DOE/EIA-0340(01) and *Natural Gas Annual 2001* DOE/EIA-0131(01).

Source: Energy Information Administration, Office of Oil and Gas.

**Table 8. Deepwater Production and Proved Reserves of the Gulf of Mexico Federal Offshore, 1992-2001**

Year	Gulf of Mexico			Depth		Deepwater Percentage	
	Total	Louisiana <sup>a</sup>	Texas	Greater than 200 meters	Less than 200 meters		
<b>Crude Oil (million barrels of 42 U.S. gallons)</b>							
<b>Production</b>							
1992	267	253	14	46	221	17.2	
1993	266	252	14	46	220	17.3	
1994	265	245	20	53	212	20.1	
1995	292	262	30	77	215	26.4	
1996	303	265	38	90	213	29.7	
1997	342	298	44	123	219	36.0	
1998	372	336	36	171	201	46.0	
1999	421	376	45	228	193	54.2	
2000	419	381	38	234	185	55.8	
2001	459	417	42	286	173	62.2	
<b>Reserves</b>							
1992	1,835	1,643	192	557	1,278	30.4	
1993	2,072	1,880	192	824	1,248	39.8	
1994	2,127	1,922	205	877	1,250	41.2	
1995	2,518	2,269	249	1,241	1,277	49.3	
1996	2,567	2,357	210	1,311	1,256	51.1	
1997	2,949	2,587	362	1,682	1,267	57.0	
1998	2,793	2,483	310	1,611	1,182	57.8	
1999	2,744	2,442	302	1,626	1,118	59.3	
2000	3,174	2,751	423	2,021	1,153	63.7	
2001	4,288	3,877	411	3,208	1,080	74.8	
<b>Natural Gas, Wet After Lease Separation</b>							
(billion cubic feet at 14.73 psia and 60° Fahrenheit)							
<b>Production</b>							
1992	4,576	3,292	1,284	166	4,410	3.6	
1993	4,651	3,383	1,268	229	4,422	4.9	
1994	4,797	3,505	1,292	294	4,503	6.1	
1995	4,679	3,421	1,258	354	4,315	7.8	
1996	5,045	3,752	1,293	549	4,496	10.9	
1997	5,230	3,984	1,246	577	4,653	11.0	
1998	4,967	3,817	1,150	724	4,243	14.6	
1999	5,000	3,829	1,171	1,124	3,876	22.5	
2000	4,901	3,747	1,154	1,196	3,705	24.4	
2001	5,027	3,843	1,184	1,367	3,660	27.2	
<b>Reserves</b>							
1992	27,050	20,006	7,044	3,273	23,777	12.1	
1993	26,463	19,751	6,712	3,495	22,968	13.2	
1994	27,626	21,208	6,418	4,772	22,854	17.3	
1995	28,229	21,664	6,565	5,811	22,418	20.6	
1996	28,153	22,119	6,034	6,389	21,764	22.7	
1997	28,455	22,428	6,027	7,491	20,964	26.3	
1998	26,937	21,261	5,676	7,575	19,362	28.1	
1999	26,062	20,172	5,890	7,726	18,336	29.6	
2000	26,891	20,466	6,425	8,731	18,160	32.5	
2001	27,100	20,290	6,810	11,229	15,871	41.4	

**Table 9. Coalbed Methane Proved Reserves and Production for 1989–2001**  
 (Billion Cubic Feet at 14.73 psia and 60° Fahrenheit)

Year	Alabama	Colorado	New Mexico	Utah	Wyoming	Eastern States <sup>a</sup>	Western States <sup>b</sup>	Others <sup>c</sup>	United States
<b>Reserves</b>									
1989	537	1,117	2,022	NA	NA	NA	NA	0	3,676
1990	1,224	1,320	2,510	NA	NA	NA	NA	33	5,087
1991	1,714	2,076	4,206	NA	NA	NA	NA	167	8,163
1992	1,968	2,716	4,724	NA	NA	NA	NA	626	10,034
1993	1,237	3,107	4,775	NA	NA	NA	NA	1,065	10,184
1994	976	2,913	4,137	NA	NA	NA	NA	1,686	9,712
1995	972	3,461	4,299	NA	NA	NA	NA	1,767	10,499
1996	823	3,711	4,180	NA	NA	NA	NA	1,852	10,566
1997	1,077	3,890	4,351	NA	NA	NA	NA	2,144	11,462
1998	1,029	4,211	4,232	NA	NA	NA	NA	2,707	12,179
1999	1,060	4,826	4,080	NA	NA	NA	NA	3,263	13,229
2000	1,241	5,617	4,278	1,592	1,540	1,399	41	--	15,708
2001	1,162	6,252	4,324	1,685	2,297	1,453	358	--	17,531
<b>Production</b>									
1989	23	12	56	NA	NA	NA	NA	0	91
1990	36	26	133	NA	NA	NA	NA	1	196
1991	68	48	229	NA	NA	NA	NA	3	348
1992	89	82	358	NA	NA	NA	NA	10	539
1993	103	125	486	NA	NA	NA	NA	18	752
1994	108	179	530	NA	NA	NA	NA	34	851
1995	109	226	574	NA	NA	NA	NA	47	956
1996	98	274	575	NA	NA	NA	NA	56	1,003
1997	111	312	597	NA	NA	NA	NA	70	1,090
1998	123	401	571	NA	NA	NA	NA	99	1,194
1999	108	432	582	NA	NA	NA	NA	130	1,252
2000	109	451	550	74	133	58	4	--	1,379
2001	111	490	517	83	278	69	14	--	1,562

<sup>a</sup>Includes Pennsylvania, Virginia, and West Virginia.

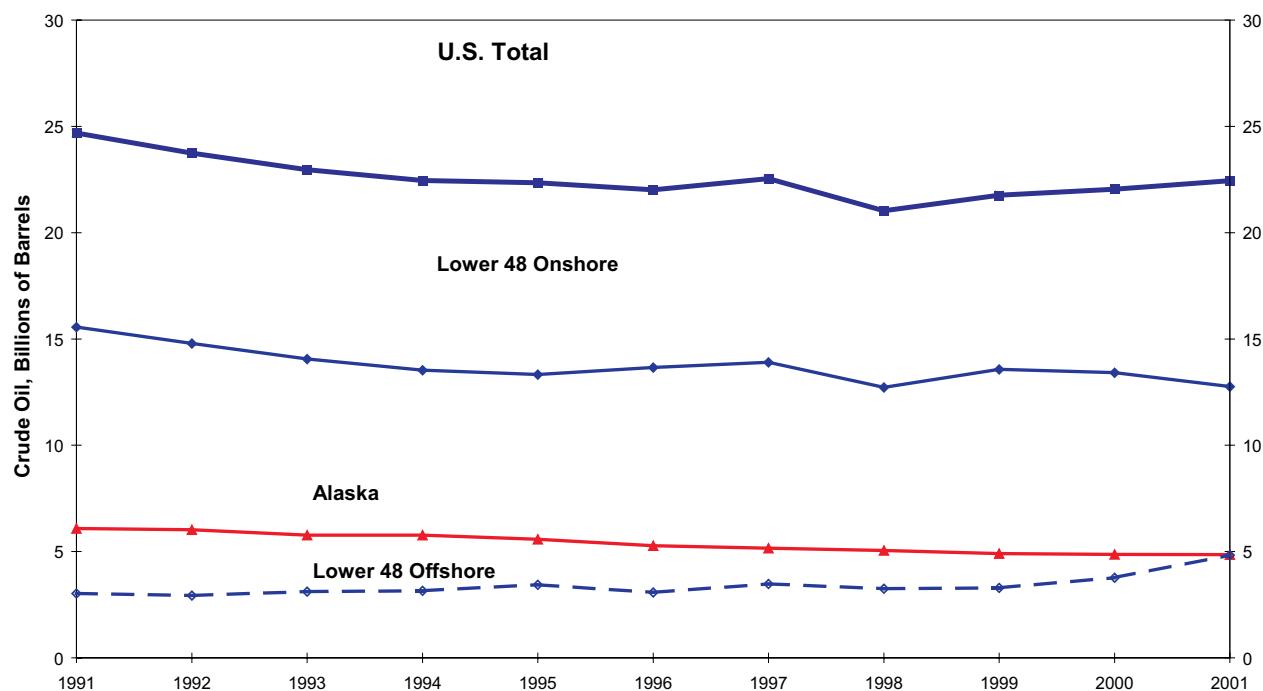
<sup>b</sup>Includes Kansas, Montana, and Oklahoma.

<sup>c</sup>Includes Oklahoma, Pennsylvania, Utah, Virginia, West Virginia, and Wyoming; these states are individually listed or grouped in Eastern States and Western States for 2001.

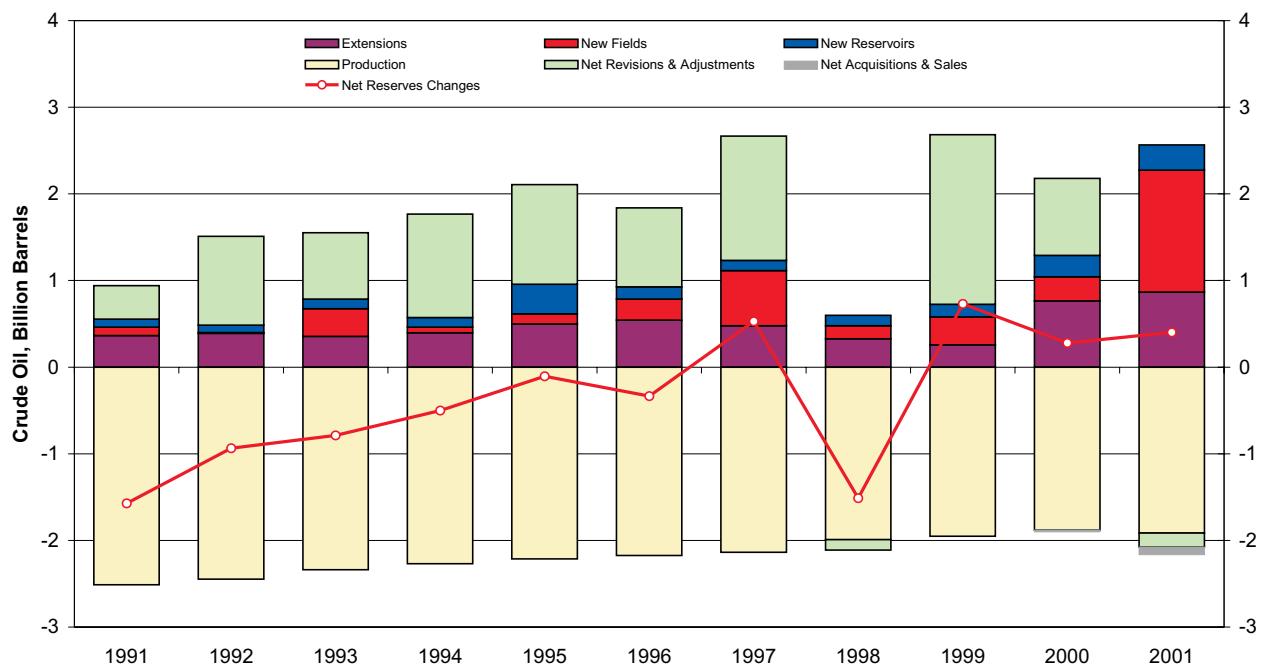
NA -- Not applicable.

Source: Energy Information Administration, Office of Oil and Gas.

**Figure 1. U.S. Crude Oil Proved Reserves, 1991-2001**

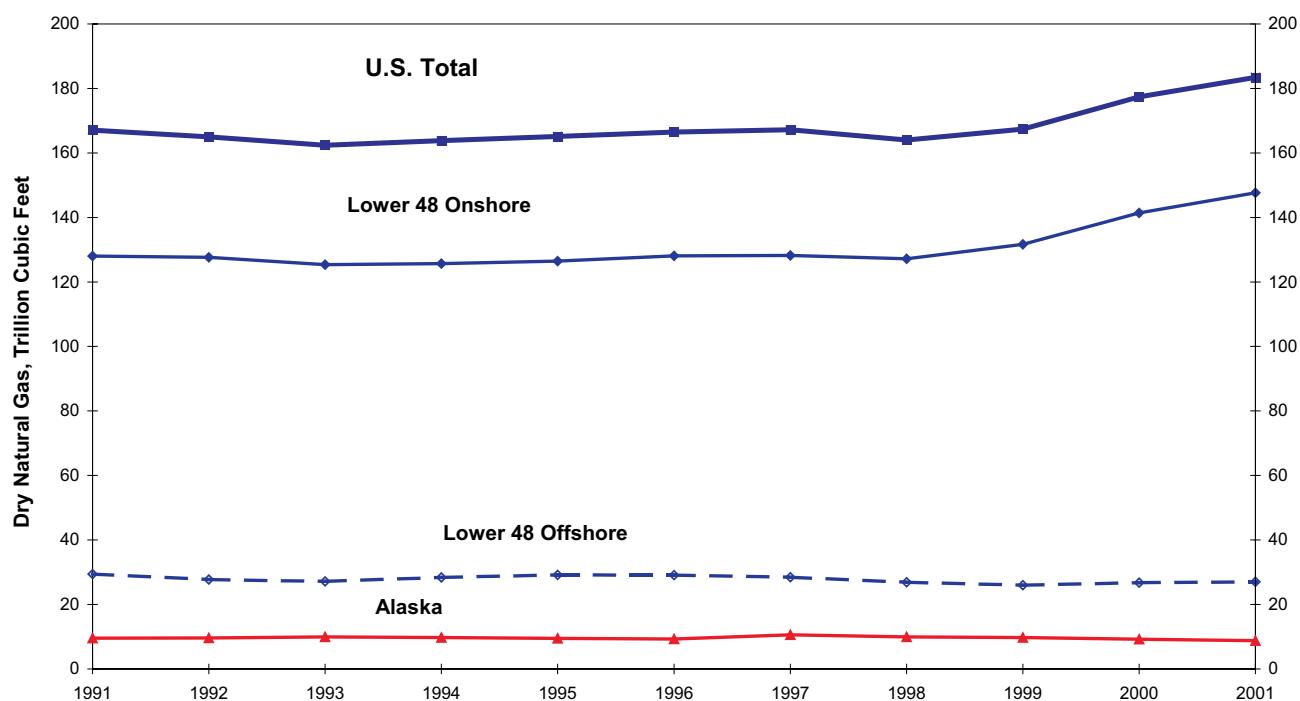


**Figure 2. Components of Reserves Changes for Crude Oil, 1991-2001**

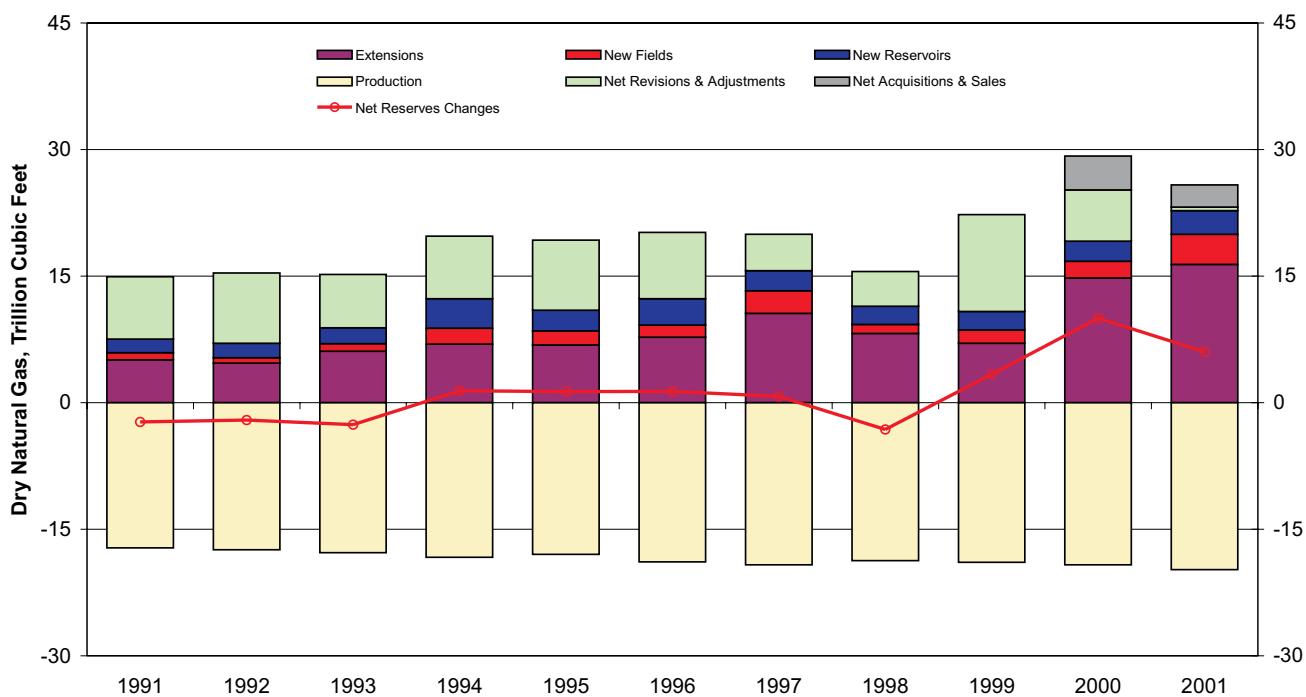


Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1991 through 2001 annual reports, DOE/EIA-0216.

**Figure 3. U.S. Dry Natural Gas Proved Reserves, 1991-2001**



**Figure 4. Components of Reserves Changes for Dry Natural Gas, 1991-2001**



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1991 through 2001 annual reports, DOE/EIA-0216.

**Figure 5. Crude Oil Production Replaced by Reserves Additions, 1992 - 2001**

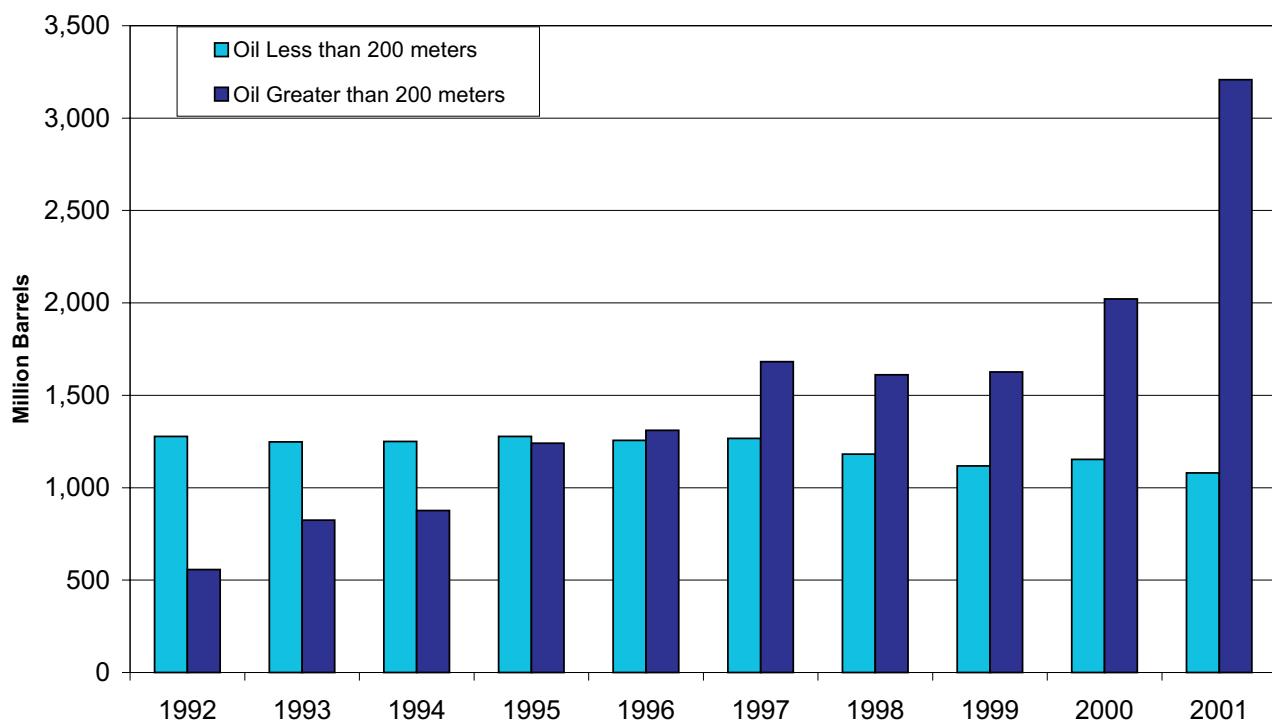


**Figure 6. Dry Natural Gas Production Replaced by Reserves Additions, 1992 - 2001**

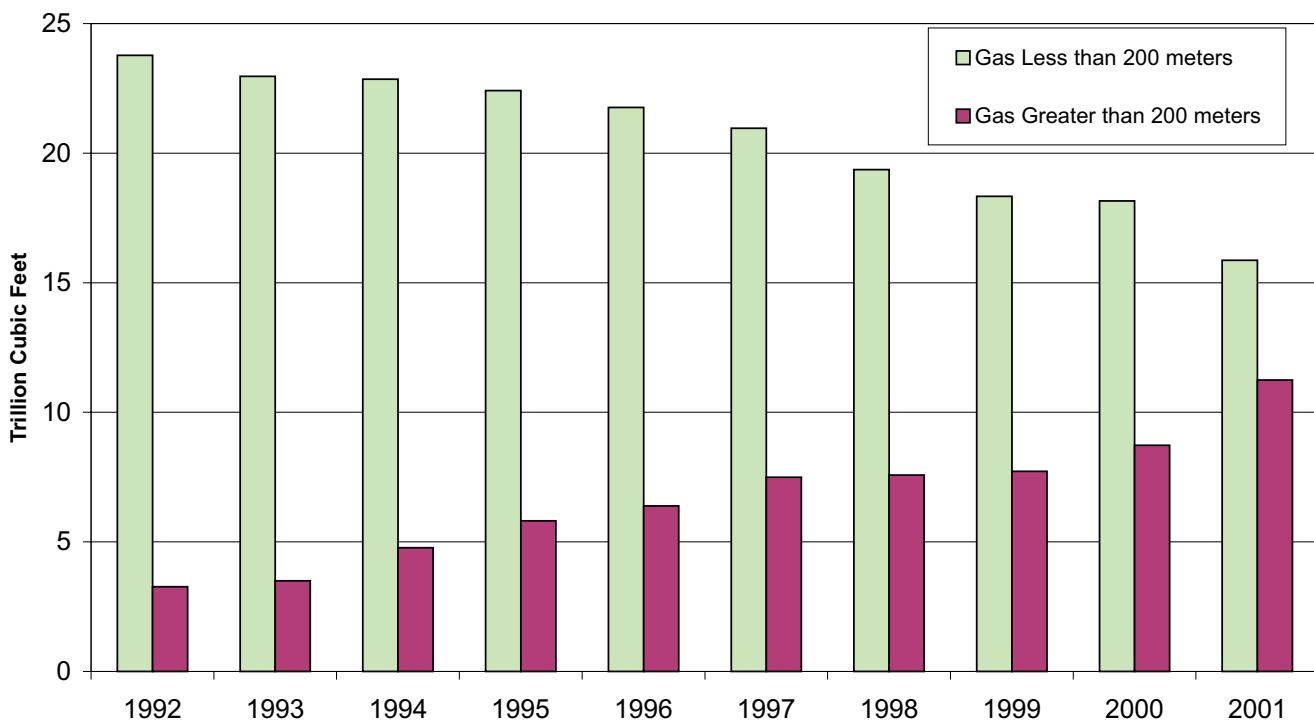


Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1992 through 2001 annual reports, DOE/EIA-0216.

**Figure 7. Gulf of Mexico Shallow and Deepwater Oil Proved Reserves, 1992 - 2001**

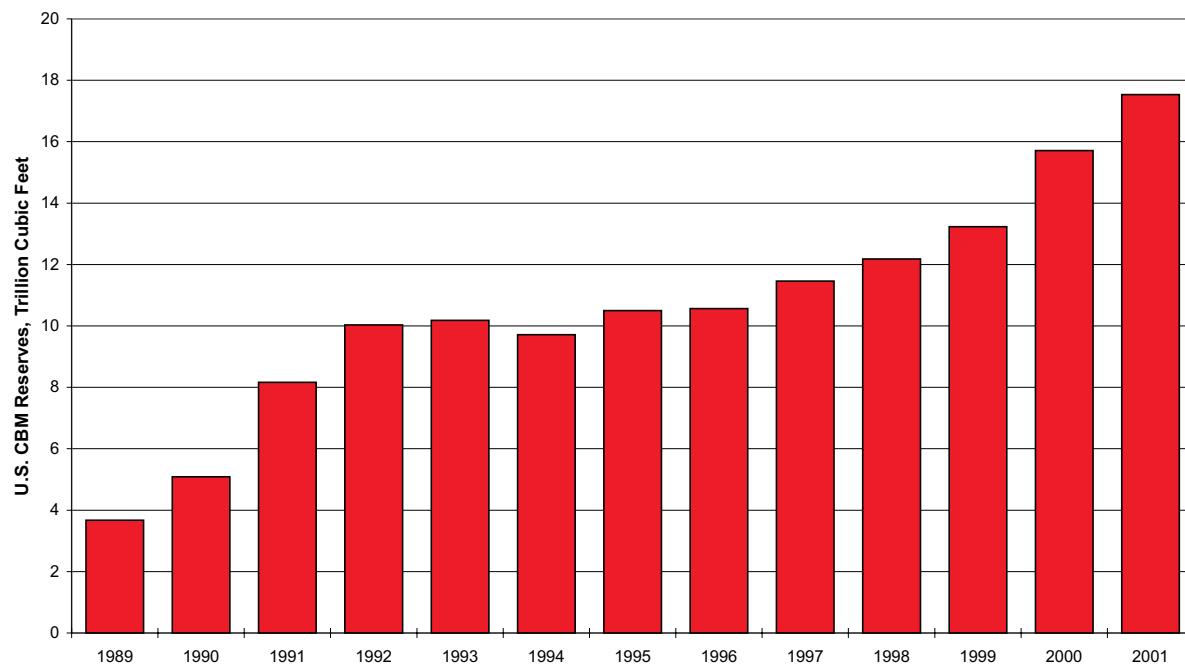


**Figure 8. Gulf of Mexico Shallow and Deepwater Dry Natural Gas Proved Reserves, 1992 - 2001**



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 2001 annual report, DOE/EIA-0216.

**Figure 9. U.S. Coalbed Methane Proved Reserves, 1989-2001**



Source: U.S. Crude Oil, Natural Gas, and Natural Gas Liquids Reserves, 1989 through 2001 annual reports, DOE/EIA-0216.

**Figure 10. Thunder Horse Field Location, Gulf of Mexico Federal Offshore**



Source: Diagram courtesy of BP p.l.c., London, England.